

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P0735D	<b>FOR FURTHER ACTION</b>	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/US02/41681	International filing date ( <i>day/month/year</i> ) 24 December 2002 (24.12.2002)	(Earliest) Priority Date ( <i>day/month/year</i> ) 24 December 2001 (24.12.2001)
Applicant DIGIMARC ID SYSTEMS, LLC		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the Report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (See Box II).

4. With regard to the **title**,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No. 4



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.



None of the figures

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International application No.

PCT/US02/41681

## Box III TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

The technical features mentioned in the abstract do not include a reference sign between parentheses (PCT Rule 8.1(d)).

### NEW ABSTRACT

In one embodiment, the invention provides a method for forming a full color laser engraved image on an ID card. As described below, a special image capable layer (200) is prepared that is addressable by one or more near infrared (NIR) lasers (208, 210, 212). Each type of particle (202, 204, 206) contained within the image capable layer (200) is associated with a particular color (e.g., cyan, magenta, yellow) and is responsive (i.e., can selectively absorb) a particular wavelength of laser energy to form a laser engraved pixel in that respective color. In one embodiment, the particles (202, 204, 206) are selected such that the wavelengths that they respond to do not overlap significantly. By providing discrete physical particles and preventing a given particle from responding to more than one laser wavelength, it can be possible to minimize so-called "cross-talk" between the cyan, magenta, and yellow centers and minimize contamination and/or chemical mixing of image formers. This helps to ensure image accuracy and quality.